2014

Curricular Report No. 2013-14-3 from the Graduate Council to the Faculty Senate.

University of Rhode Island Faculty Senate

THE
UNIVERSITY
OF RHODE ISLAND
FACULTY SENATE OFFICE
Green Hall, 35 Campus Avenue, Kingston, RI 02881 USA p: 401.874.2616

THINK BIG WE DO™

Serial Number #13-14—11

TO: President David Dooley
FROM: David Byrd, Chairperson of the Faculty Senate

1. The attached BILL titled, Curricular Report No. 2013-14-3 from the Graduate Council to the Faculty Senate, is forwarded for your consideration.

2. This BILL was adopted by vote of the Faculty Senate on January 23, 2014.

3. After considering this bill, will you please indicate your approval or disapproval. Return the original, completing the appropriate endorsement below.

4. In accordance with Section 10, paragraph 4 of the Senate's By-Laws, this bill will become effective February 13, 2014, three weeks after Senate approval, unless: (1) specific dates for implementation are written into the bill; (2) you return it disapproved; or (3) the University Faculty petitions for a referendum.

David M Byrd

January 24, 2014

David Byrd
Chairperson of the Faculty Senate

ENDORSEMENT

TO: Chairperson of the Faculty Senate

FROM: President of the University

a. Approved ✓.

b. Approved subject to Notice to the Board of Education ____.

c. Approved subject to final approval by Board of Education ____.

d. Disapproved ____.

David M Dooley

Signature of the President

2.13.14

(date)

GRADUATE COUNCIL CURRICULUM REPORT #3, DECEMBER 2013

I. 500/600-level courses

New Courses

1) College of the Environment and Life Sciences

EVS 540X Exploring the Dimensions of Corporate Responsibility
This course explores how businesses address environmental and social issues, and addresses their environmental impact and practices through a multilateral assessment of a business's economic, environmental and social activities. Pre: Graduate standing.

Additional Curricular Matters

1) Interdisciplinary Neuroscience Program

Neuroscience – Proposed Requirements

M.S., Ph.D.
401.874.4233, uri.edu/gsadmis/inp
The Interdisciplinary Neuroscience Program involves faculty from the departments of Biological Sciences; Biomedical and Pharmaceutical Sciences; Chemistry; Cell and Molecular Biology; Communicative Disorders; Electrical, Biomedical, and Computer Engineering; Mechanical, Industrial, and Systems Engineering; Psychology; and Physical Therapy. It is administered by the Graduate School and an executive committee appointed by the dean of each participating college.

Executive Committee: Professor Zawia, *chair*, Professors Gabriele Kass-Simon, Lisa Weyandt, Associate Professors Besio, Mahler and Seeram, Adjunct Professor Mosley Austin.
Faculty: Professors Dufresne, Faghri, Faust, Hufnagel, Kass-Simon, Kay, Kumaresan, Ohley, Sun, Webb, Weyandt, Willis, and Zawia; Associate Professors Agostinucci, Besio, DeBoef, Goren, He, Kim, Kovoor, Mahler, Martin, Seeram, and Sun; Assistant Professors Leveilee and Worthen; Adjunct Professors Anagnostopoulos, DiCecco, and Mosley Austin.

Specializations
Dementia and aging; central nervous system disorders; vertebrate and invertebrate cellular, molecular, and behavioral neurobiology imaging; and neural engineering.

Master of Science
Admission requirements: GRE general test, a bachelor's degree in the sciences (or related disciplines), two letters of recommendation, a statement of purpose, and transcripts of all previous degrees are required. Applicants are encouraged to specify in their statement of purpose one or more faculty members with whom they are interested in working, and to explain why. Students with deficiencies in undergraduate courses relevant to their Program of Study may be required to take additional courses without program credit.
In general, students will be admitted if they meet the minimum GRE requirements (a combined verbal and quantitative score of 300 in the new system and 1,100 in the old system), a minimum GPA of 3.00, good letters of recommendation, and an acceptable statement of purpose. In exceptional circumstances, the student who falls short may still be considered for admission with further evaluation.

Program requirements: The program requires a minimum of 30 credits: 18-20 in required coursework, 6-9 in thesis research, and 1-6 in electives. Required courses include: NEU 502, 503, 504, PSY 532, as well as at least one credit of NEU 581/582. Two semesters (4-6 credits) of NEU 591 are required, one in the student's primary area of research, and one in a related discipline. Total research credits in NEU 591 and NEU 599 used towards the degree must not exceed 12 credits. Two semesters of journal club (NEU 587 or equivalent), a thesis proposal and successful defense of thesis are required.

Doctor of Philosophy

Admission requirements: Same as for master's degree.

Program requirements: Successful completion of a qualifying examination or an earned M.S. with thesis in an appropriate discipline, a comprehensive examination, and dissertation defense. As the qualifying exam is meant to be equivalent to the M.S. degree, the examination must be taken no later than the first semester following the completion of eighteen credits of coursework. This examination is intended to assess a student's potential to perform satisfactorily at the doctoral level. A minimum of 72 credits is required, 18 to 28 of which may be earned through dissertation research (NEU 699). Up to 30 credits will be accepted for students who have already earned an M.S. degree. Registration in NEU 581 and 582 is required for one year, and successful completion of NEU 502, 503, and 504 are required. PSY 532 (or equivalent) and one additional statistics or computational analysis course (e.g. STA 500, 502, 541, or 545) are required. Two semesters of NEU 591 are required, one in the student's primary area of research, and one in a related discipline. Doctoral students must enroll in journal club (NEU 587 or equivalent) each semester until completing comprehensive exams. In the final semester, a formal presentation of dissertation research is required in 581/582.

Postbaccalaureate Certificate in Neuroscience
A student who does not seek a neuroscience degree, but instead wants official recognition that he/she has specific training and instruction in neuroscience, can receive a Certificate in the Neurosciences.

Admission requirements: A bachelor's degree in any field with a 3.00 GPA or higher. Students already enrolled in a master's or doctoral degree at URI are eligible to apply. Students not in a graduate degree program may also apply.

Program requirements: Students will be required to successfully complete 12 credits of neuroscience coursework including NEU 503.

Neuroscience – former 2012 Requirements

M.S., Ph.D.
401.874.4233, uri.edu/gsadmis/inp
The Interdisciplinary Neuroscience Program involves faculty from the departments of Biological Sciences; Biomedical and Pharmaceutical Sciences; Chemistry; Cell and Molecular Biology; Communicative Disorders; Electrical, Biomedical, and Computer Engineering; Mechanical, Industrial, and Systems Engineering; Psychology; and Physical Therapy. It is administered by the Graduate School and an executive committee appointed by the dean of each participating college.

Executive Committee: Professor Zawia, *chair*, Professors Gabriele Kass-Simon, Lisa Weyandt, Associate Professor Besio, Assistant Professors Mahler and Worthen, Adjunct Professor Mosley Austin.
Faculty: Professors Faghri, Hufnagel, Kass-Simon, Kay, Kumaresan, Ohley, Parang, Sun, Webb, Weyandt, Willis, and Zawia; Associate Professors Agostinucci, Besio, DeBoef, Goren, Kim, Kovoor, Mahler, Martin, Seeram, and Sun; Assistant Professors He and Worthen; Adjunct Professors Anagnostopoulos, DiCecco, and Mosley Austin.

Specializations
Dementia and aging; central nervous system disorders; cellular, molecular, and behavioral neurobiology imaging; and computational intelligence.

Master of Science
Admission requirements: GRE general test, a bachelor's degree in the sciences (or related disciplines), two letters of recommendation, a statement of purpose, and transcripts of all previous degrees are required. Applicants are encouraged to specify in their statement of purpose one or more faculty members with whom they are interested in working, and to explain why. Students with deficiencies in undergraduate courses relevant to their Program of Study may be required to take additional courses without program credit.
In general, students will be admitted if they meet the minimum GRE requirements (a combined verbal and quantitative score of 300 in the new system and 1,100 in the old system), a minimum GPA of 3.00, good letters of recommendation, and an acceptable statement of purpose. In exceptional circumstances, the student who falls short may still be considered for admission with further evaluation.

Program requirements: The program requires a minimum of 30 credits: 18-20 in coursework, 6-9 in research, and 1-6 in electives. Required courses include: NEU 502, 503, 504; PSY 532; as well as at least one credit NEU 581/582. A thesis proposal and successful defense of thesis are required. In the final semester, a formal presentation of thesis research is required in 581/582.

Doctor of Philosophy
Admission requirements: Same as for master's degree.

Program requirements: Successful passage of a qualifying examination or an earned M.S. with thesis in an appropriate discipline, a comprehensive examination, and dissertation defense. As the qualifying exam is meant to be equivalent to the M.S. degree, the examination must be taken no later than the first semester following the completion of eighteen credits of coursework. This examination is intended to assess a student's potential to perform

satisfactorily at the doctoral level. A minimum of 72 credits is required, 18 to 28 of which may be earned through dissertation research (NEU 699). Up to 30 transfer credits will be accepted for students who have already earned an M.S. degree. Registration in NEU 581 and 582 is required for one year, and successful completion of NEU 502, 503, and 504 are required. ~~Depending on a student's previous training and experience, certain requirements may be waived at the discretion of the student's dissertation committee and the Graduate School. Students may also be required to take PSY 532 to remedy deficiencies in background~~. In the final semester, a formal presentation of thesis research is required in 581/582.

Postbaccalaureate Certificate in Neuroscience
A student who does not seek a neuroscience degree, but instead wants official recognition that he/she has specific training and instruction in neuroscience, can receive a Certificate in the Neurosciences.

Admission requirements: A bachelor's degree in any field with a 3.00 GPA or higher. Students already enrolled in master's or doctoral degrees at URI are eligible to apply. Students not in a graduate degree program may also apply.

Program requirements: Students will be required to successfully complete 12 credits of neuroscience coursework including NEU 503.

Proposed changes
to the
Master's Degree and Ph.D. programs
in
Computer Science

Pages 2 and 3 of this document contain the proposed revision to the Master's Degree program and the Ph.D. program in Computer Science.

For convenience, pages 4 through 6 contain, side by side, the current version in these programs from the URI catalog (pp. 108-109), and the revised version of these same programs.

Rationale for the proposed changes
The last revision of our graduate programs goes back to more than 10 years. In a very fast-changing field, the intent of this latest revision of our graduate programs' requirements is to offer more flexibility to our graduate students.

The main change is in the grouping of the courses that are part of the distribution requirements. Our graduate students are required to take courses currently distributed in 7 groups. The largest one, the applications group, is the "catch-all" group. The remaining 6 groups are being reorganized into 3 areas, which include all of our core courses. With one exception, we have excluded from these 3 core areas all 400-level courses.

Another, simple, change in our Master's Degree program is to remove the current maximum of courses taken at the 400-level. This might, in the case of a program of study including exclusively 4-credit courses, allow a Master's Degree student to take up to one more course at 400-level. Arguably, this could lower the quality of our graduate programs. The elimination of 400-level courses from our core areas, however, will compensate for the possible addition of one 400-level course.

Yet another, minor, change will affect the admission requirement replacing MTH215 and MTH243, currently required, by any calculus-based MTH or STA course.

The remaining changes are mostly editorial to adjust for the changes in the distribution requirements from the original 7 groups to the proposed 3 core areas.